

TIMOFEEV-RESOVSKIY, N.V.; TIMOFEEVA-RESOVSKAYA, Ye.A.; MILYUTINA, G.A.;
GETSOVA, A.B.

Coefficients of the accumulation of radioactive isotopes of 16
different elements by fresh-water organisms and the effect of
the EDTA complexon on some of them. Dokl.AN SSSR 132 no.5:
1191-1194 Je '60. (MIRA 13:6)

1. Otdel biofiziki i radiobiologii Biologicheskogo instituta
Uralskogo filiala Akademii nauk SSSR i Zoologicheskii institut
Akademii nauk SSSR. Predstavleno akademikom Ye.N. Pavlovskim.
(ACETIC ACID) (RADIOISOTOPES) (FRESH-WATER BIOLOGY)

S/020/60/132/05/60/069
B011/B002

AUTHORS: Timofeyev-Resovskiy, N. V., Timofeyeva-Resovskaya, Ye. A.,
Milyutina, G. A., Getsova, A. B.

TITLE: Coefficients of the Accumulation of Radioisotopes of
Sixteen Different Elements by Fresh Water Organisms and
the Influence of Complexon EDTA on Some of Them

PERIODICAL: Doklady Akademii nauk SSSR, 1960, Vol. 132, No. 5,
pp. 1191-1194

TEXT: The accumulation coefficient (AC) of radioisotopes can be easily determined by means of tagged atoms. By AC one understands the ratio between the concentration of the respective isotope in an organism and its concentration in water. Data concerning sixteen isotopes as well as nineteen plant- and seventeen animal species are compiled in the present paper. Moreover, experimental results are specified concerning the influence of EDTA (ethylene diamine tetraacetate or Trilon B) upon AC. The authors studied the accumulation coefficients of the isotopes of P, S, Ca, Fe, Co, Zn, Ge, Rb, Sr, Y, Zr, Nb, Ru, I, Cs, and Ce. Special

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Coefficients of the Accumulation of Radio-isotopes of Sixteen Different Elements by Fresh Water Organisms and the Influence of Complexon EDTA on Some of Them

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experiments revealed that AC, in the case of a micro-concentration of isotopes, is not greatly dependent on their concentration in water. Previous experiments conducted by the authors (Ref. 10) indicated that AC was rather quickly stabilized. Experiments were made in aquariums at room temperature. Fig. 1 offers a survey of AC in the case of plants and animals. It results therefrom that AC of plants are higher than those of animals with respect to all elements mentioned (except P and Sr). Furthermore, the elements form two groups: such with high (some thousands) and such with low AC. To the former belong: P, Fe, Co, Zn, Y, Zr, Nb, and Ce, to the latter all the rest, especially S, Ge, I, and Cs. With plants, the following yield especially high AC: Fe, Zn, Y, Nb, and Ce, with animals: Co, Zn, Y, Nb, and Ce. Table 1 offers numerical values of AC cross sections. It follows therefrom that in plants this value is about four times, for Sr^{90} , Y^{91} , Zr^{95} , Ru^{106} , Cs^{137} , and Ce^{144} somewhat higher than in animals. The authors offer experimental results on the EDTA influence on AC of fifteen isotopes in seven plant- and five animal species (Fig. 2). It may be seen therefrom that in the presence of EDTA,

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Coefficients of the Accumulation of Radio-isotopes of Sixteen Different Elements by Fresh Water Organisms and the Influence of Complexon EDTA on Some of Them

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the accumulation coefficients of Fe, Co, Zn, Y, and Ce drop markedly (by the 10-100fold). The accumulation coefficients of Ca, Zr, Nb, Ru, and I are somewhat reduced, those of Rb, Sr, and Cs are increased, and those of all other elements are practically left almost unchanged by EDTA. The authors explain the action mechanism of EDTA in individual elements by differently high stability constants of their complex compounds with EDTA. The S, Ge, and I, which are not influenced by EDTA, probably do not form any compounds with the latter. The reduction of the accumulation coefficients of Zr, Nb, and Ru as well as the increase of those of Rb and Cs are not explained by direct EDTA action, but by a disturbance of the Ca reaction under the influence of EDTA. The most dangerous are Sr- and Cs isotopes as components of contaminated water. Possibly, the addition of Trilon B to contaminated water may promote the biological purification from isotopes. The authors made experiments in this respect. Papers by V. I. Vernadskiy (Ref. 8) and A. P. Vinogradov (Ref. 9) are mentioned. There are 2 figures, 1 table, and 16 Soviet references.

Card 3/4



Coefficients of the Accumulation of Radio-
isotopes of Sixteen Different Elements by
Fresh Water Organisms and the Influence of
Complexon EDTA on Some of Them


S/020/60/132/05/60/069
B011/B002

ASSOCIATION: Otdel biofiziki i radiobiologii Biologicheskogo instituta
Ural'skogo filiala Akademii nauk SSSR (Department of
Biophysics and Radiobiology of the Biological Institute of
the Ural Branch of the Academy of Sciences, USSR).
Zoologicheskii institut Akademii nauk SSSR (Zoological
Institute of the Academy of Sciences, USSR)

PRESENTED: February 6, 1960, by Ye. N. Pavlovskiy, Academician

SUBMITTED: January 11, 1960

Card 4/4



GETSOVA, A.B.; LYAPUNOVA, N.A.; POLIKARPOV, G.G.; TIMOFEEVA-RESOVSKAYA, Ye.A.

Accumulation of chemical elements from water solutions in fresh-water organisms: Report No.4: Accumulation of radioisotopes of eight different elements in mussel tissues. Nauch. dokl. vys. shkoly; biol. nauki no.4:82-88 '64. (MIRA 17:12)

1. Rekomendovana Institutom biologii Ural'skogo filiala AN SSSR.

TIMOFEYeva-RESOVSKAYA, Yelena Aleksandrovna; LUCHNIK, N.V., kand.
biolog. nauk, otv. red.; FAVORSKAYA, A.P., red. izd-va;
PAL'MIN, M.Z., tekhn. red.

[Distribution of radioisotopes among the basic components
of bodies of fresh water.] Raspredelenie radioizotopov po
osnovnym komponentam presnovodnykh vodoemov. Sverdlovsk,
1963. 76 p. (Akademiia nauk SSSR. Ural'skii filial. Institut
biologii. Trudy, no.30) (MIRA 17:1)

TIMOFEYEV-RESOVSKAYA, Ye.A.; AGAFONOV, B.M.; TIMOFEYEV-RESOVSKIY, N.V.

Fate of radioisotopes in the bodies of water. Trudy Inst. biol.
UFAN SSSR. no. 22:49-67 '62. (MIRA 16:3)
(RADIOISOTOPES) (WATER—POLLUTION)

ТИМОФЕYEВА-ТЮЛИНА, К. Т.

60/4972

USSR/Agriculture
Grain
Soils

Sep/Oct 48

"The Cause of losses in Winter Grain in the Central Black Earth Belt," M. T. Timofeyeva-Tyulina, Cand. Biol Sci, Inst of Farming for the Cent. Black Earth Belt, ment Prof V. V. Dokuchayev, Talovaya, Voronezh Oblast, 15 pp

"Agrobiol" No 5

Late autumn or winter thaws sometimes cause developments in plants leading to loss of winter-resistance. Winter-resistance is determined chiefly by

60/4972

USSR/Agriculture (Contd)

Sep/Oct 48

processes of development and stages during the winter-spring period. By creating varieties which need more daylight and higher temperature for growth of the ear and by regulating soil conditions, good hibernation and winter grain crops may be obtained.

60/4972

CHIZHEVSKIY, A.L., professor (Karaganda); TIMOFEYEVICH, A.V., zaveduyushchiy;
TYSHCHENKO, Z.A., glavnyy vrach.

Electric reaction of the precipitation of red blood corpuscles: preliminary report. Klin.med. 31 no.3:60-63 Mr '53. (MLRA 6:5)

1. Klinicheskaya laboratoriya khirurgicheskogo otdel'niya Karagandinskoy oblastnoy bol'nitsy (for Timofeyevich). 2. Karagandinskaya oblastnaya bol'nitsa (for Tyshchenko). (Blood--Corpuscles and platelets)

TIMOFEEVICH, A.V.

Spinal injuries. Trudy Inst. klin. i eksp. khir. AN Kaz. SSR 1:54-64
'54 (MLRA 10:5)

1. Iz Karagandinskoy gorodskoy travmatologicheskoy bol'nitsy
(Kazakhskaya SSR) i Instituta klinicheskoy i eksperimental'noy
khirurgii Akademii nauk Kazakhskoy SSR.
(SPINE--WOUNDS AND INJURIES)

TIMOFEYEVICH, I. M.

Textile Fibers, Synthetic

Strengthening knitted fabric yarn with caprone staple. Leg prom. 12 No. 5, 1952.

Monthly List of Russian Accessions, Library of Congress, August 1952. Unclassified.

1. TIMOFEYEVICH, Eng. I. M.
2. USSR (600)
4. Mercerization
7. Singeing and mercerization of hosiery yarn. Leg.prom. no. 12, 1952

9. Monthly Lists of Russian Accessions, Library of Congress, March 1953, Unclassified.

1. Timofeyevich, I.M. (Eng.)
2. USSR (600)
4. Hosiery
7. Singeing and mercerization of hosiery yarn. leg. prom. no.12, 1952.
9. Monthly List of Russian Accessions. Library of Congress, March 1953, Unclassified.

TIMOFEYEVICH, I.M., kand. tekhn. nauk, starshiy nauchnyy sotrudnik

State standard for rings and travelers. Tekst. prom. 23
no.7:75-81 J1 '63. (MIRA 16:8)

1. Vsesoyuznyy nauchno-issledovatel'skiy institut legkogo i
tekstil'nogo mashinostroyeniya.
(Spinning machinery—Standards)

TIMOFEYEVICH, Vladimir Semenovich, inzhener; SOKOLOVA, A.D., kandidat
tekhnicheskikh nauk, nauchnyy redaktor; VLADIMIROVICH, A.G.,
redaktor; MATUSEVICH, N.L., tekhnicheskiy redaktor.

[Assembling steel structural elements] Montazh stal'nykh kon-
struktsii. Izd. 2-oe, ispr. i dop. Moskva, Vses. uchebno-pedagog.
izd-vo Trudrezervizdat, 1956. 323 p. (MLRA 10:6)
(Building, Iron and steel)

TIMOFEYEVICH, M.; SOLOV'YEV, A.

Automatic device for switching-on electric lights. V pom.
radiolub.no.11:73-77 '61. (MIRA 15:6)
(Automatic control) (Electric lighting)

TIMOFEEVICH, Vladimir Semenovich, inzhener; SOKOLOVA, A.D., kandidat
tekhnicheskikh nauk, redaktor; YUDIN, S.T., inzhener, redaktor;
BUEMISTROV, G.N., redaktor; OSTRIROV, N.S., tekhnicheskii redaktor.

[Erecting steel structures] Montash stal'nykh konstruktsii.
Moskva, Vses.uchebno-pedagog.izd-vo, 1955. 270 p. (MLRA 8:11)
(Building, Iron and Steel)

ТИМОНЕНКО, МАРИЯ СЕРГЕЕВНА.

3/5
703.04
.15

Montazh stal'nykh konstruktsiy (Assembling steel constructions) Moskva,
trudrezervirovat, 1955.

270 p. Illus., Diagrams., Tables.

26

BTR

4631* Experimental Investigation of the Surface Tension
of Calcium Amalgams. (In Russian.) P. P. Pugachevich and
O. A. Timofeyevichova. *Doklady Akademii Nauk SSSR*, new
ser., v. 74, Aug. 11, 1951, p. 831-832.
Includes diagram of apparatus and graph of results.

C.A.

1
Experimental study of the surface tension of potassium amalgam. P. P. Pugachevich and O. A. Timofeyevich. Doklady Akad. Nauk S.S.S.R. 79, 831-833 (1961). The surface tension, σ , was measured by the dropping method in a closed app. in vacuo. At 20°, a K content of 5×10^{-4} wt. % produces a sharp fall of σ from 470 to 415 dynes/cm. Further increase of the K content causes a much slower decrease of σ . Between 0.1 and 0.6 at. % K, σ falls linearly from 390 to 375 dynes/cm. N. Thon

TIMOFEEVICHEN, O. A.

*Experimental Investigation of the Surface Tension of Sodium Amalgams. P. P. Puzachevich and O. A. Timofeevich (Doklady Akad. Nauk S.S.S.R., 1954, 94, (2), 285-287).—[In Russian]. The surface tension, σ , of Na amalgams contg. 8×10^{-4} –0.234 at.-% Na was determined in high vacuum at 22° C. σ decreased with the increasing concentration of Na in the amalgam at first rapidly and then, above 0.02 at.-% Na, more gradually. The curve obtained differed radically from the curve determined by Converse (J. Chim. phys., 1939, 36, 175; M.A., 7, 98) in that it did not exhibit any min. or max. The difference was attributed to the extreme care taken in this work to exclude traces of any impurities from the system.—S. K. L.

PUGACHEVICH, P.P.; TIMOFYEVICHEVA, O.A.

Surface tension of infinitely diluted alkali metal amalgams.
Dokl.AN SSSR 104 no.1:98-100 S '55. (MLHA 9:2)

1. Institut obshchey i neorganicheskoy khimii imeni N.S.Kurnakova Akademii nauk SSSR. Predstavleno akademikom I.I.Chernyayevym.

(Surface tension) (Amalgams)

Name: TRAFYEYEVICHAYA, U. A.

Dissertation: An experimental study of the surface tension of maximally diluted amalgams of alkali metals

Degree: Cand Phys-Math Sci

Defended at
~~Institution~~: Moscow Oblast Pedagogical Inst

Publication
~~Defense~~ Date, Place: 1956, Moscow

Source: Knizhnaya Letopis', No 45, 1956

~~Timofeevich~~ ~~EVA~~ ~~DA~~ Timofeevich, O. A.

PLW
Rb, K, Na, and Cs was measured in the alkali metal
gaseous phase of Na, K, and Cs was measured in the alkali metal
earlier [Dostoyevskiy, 1964, No. 57, 770-771]. O. A. Timofeevich
earlier [Dostoyevskiy, 1964, No. 57, 770-771]. O. A. Timofeevich
earlier [Dostoyevskiy, 1964, No. 57, 770-771]. O. A. Timofeevich

5(4), 18(6)

AUTHORS:

Timofeyevicheva, G. A., Pugachevich, B. P. SOV/20-124-5-37/62

TITLE:

The Surface Stress of Metallic Indium (Poverkhnostnoye natyazheniye metallichesкого indiya)

PERIODICAL:

Doklady Akademii nauk SSSR 1959, Vol 124, Nr 5, pp 1093-1094 (USSR)

ABSTRACT:

The present paper investigates the temperature dependence of the surface stress of indium in connection with the solution of some problems arising in the production of semiconductors. Short reference is made to some earlier papers dealing with this subject. The perfected method of 2 capillaries (Ref 2) requires the use of a noble gas. The wetting angle between the melted indium and the material of the capillary was here assumed to be 180° and to be independent of temperature. This assumption holds only in first approximation for some pure metals but not in the case of measurement of the surface stress of metallic solutions containing metal-active additions. Therefore the authors based measurements of the surface stress of indium and its alloys upon the method of maximum pressure in a drop. With this method it is not necessary to take the wetting angle on the boundary into account. For these measure-

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The Surface Stress of Metallic Indium

SOV/20-124-5-37/62

ments the authors used gravitation devices made from molybdenum glass at high-vacuum conditions. Carrying out of measurements and the indium samples used for the experiments are described in short. The authors carried out about 500 individual investigations of the surface stress of indium within the interval of from 170 to 500° and obtained the following result: Surface stress is a linear function of temperature and may be represented (by the method of the least squares) by the equation $\sigma = 569.3 - 0.085t$. Finally, the authors compare their results with those obtained by other authors. There are 2 figures and 4 references.

ASSOCIATION: Institut obshchey i neorganicheskoy khimii im. N. S. Kurnakova Akademii nauk SSSR (Institute for General and Inorganic Chemistry imeni N. S. Kurnakov of the Academy of Sciences, USSR)

PRESENTED: October 25, 1958 by I. I. Chernyayev, Academician

SUBMITTED: October 21, 1958

Card 2/2

TIMOFEYEVICHEVA, O.A.; VALETOV, N.N.; ANUROV, N.S.

Apparatus for measuring interfacial tension between two liquids. Zhur.
fiz.khim. 37 no.10:2361-2362 O '63. (MIRA 17:2)

1. Institut obshchey i neorganicheskoy khimii imeni N.S.Kurnakova AN
SSSR, Moskva.

TIMOFEYEVICHEVA, O.A.

Dual gas instrument for measuring the surface tension of liquids. Zhur. fiz. khim. 35 no.5:1140-1141 My '61.

(MIRA 16:7)

1. Institut obshchey i neorganicheskoy khimii AN SSSR.
(Surface tension)

TIMOFEYEVICHEVA, O.A.; LAZAREV, V.B.; PERSHIKOV, A.V.

Temperature dependence of the surface tension of cesium. Dokl. AN
SSSR 143 no.3:618-620 Mr '62. (MIRA 15:3)

1. Institut obshchey i neorganicheskoy khimii im. N.S.Kurnakova
AN SSSR. Predstavleno akademikom I.V.Tananayevym.
(Cesium)(Surface tension)

TIMOFEEVICHEVA, O.A.; LAZAREV, V.B.

Surface tension of metallic cesium. Izv. AN SSSR Otd.khim.nauk
no.2:358-359 F '62. (MIRA 15:2)

1. Institut obshchey i neorganicheskoy khimii im. N.S.Kurnakova
AN SSSR.

(Cesium)

(Surface tension)

55525

S/020/62/143/003/023/029
B101/B144

11.4110
AUTHORS:

Timofeyevicheva, O. A., Lazarev, V. B., and Pershikov, A. V.

TITLE:

Dependence of surface tension of cesium on temperature

PERIODICAL:

Akademiya nauk SSSR. Doklady, v. 143, no. 3, 1962, 618 - 620

TEXT: The surface tension of Cs at 62 - 280°C was measured. As Cs wets the glass well in vacuum and in inert atmosphere the method of maximum pressure in the gas bubble was chosen, and a special apparatus constructed (Fig. 1). After evacuation of the apparatus ~40 g Cs were distilled in vacuum through the tube 3 into the containers 1 and 2, the apparatus was filled with purified argon up to a pressure of 480 mm Hg, melted at 4.4', and placed in a thermostat. Turning clockwise in the plane of the figure filled the manometer 5 and the lower part of 6 with Cs, so that the capillary 7 dipped into Cs. After returning to the original position the metal residue in 2 was led through 8 and 9 into 1 by turning the apparatus round the x-x₁ axis. The plane of 5 forms a small angle with the symbol plane, so that Cs could not flow out of 5 and 6. The resulting difference in pressure led to the formation of gas bubbles in capillary 7.

Card (1/3)

Dependence of surface tension...

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B101/B144

Measurement of h_1 , the depth of immersion of capillary 7 in Cs, was unnecessary. The surface tension σ was calculated by M. Cantor's method. The linear dependence: $\sigma = 68.4 - 0.046(t - 28)$ was found for the temperature range examined. The maximum deviation of the experimental data from the calculated data was less than 1 dyne/cm. Comparison with the theoretical investigations of K. Huang, G. Wyllie (Proc. Phys. Soc., A 62, 180 (1949)); R. Stratton (Phil. Mag., 44, 1247 (1953)), and G. K. Baldock (see below) led to the conclusion that the theories applied therein need perfecting or assumptions made need revision. There are 2 figures and 18 references: 8 Soviet-bloc and 10 non-Soviet-bloc. The four most important references to English-language publications read as follows: J. W. Taylor, Phil. Mag., 46, 379, 867 (1955); C. C. Addison, D. H. Kerridge, J. Lewis, J. Chem. Soc., 1954, 2861; J. W. Taylor, Metallurgia, 50, 161 (1954); G. K. Baldock, Proc. Phys. Soc., A 66, 2 (1953).

ASSOCIATION: Institut obshchey i neorganicheskoy khimii im. N. S. Kurnakova Akademii nauk SSSR (Institute of General and Inorganic Chemistry imeni N. S. Kurnakov of the Academy of Sciences USSR)

Card 2/3

TIMOFEEVICHIEVA, O.A. (Moskva)

Surface tension and the structure of metal alloys. Izv. AN.
SSSR. Otd. tekhn. nauk. Met. i topl. no.3:147-150 My-Je '61.
(MIRA 14:7)

(Surface tension) (Alloys--Metallography)

33985
S/062/62/000/002/010/013
B117/B138

11.4110
AUTHORS:

Timofeyevicheva, O. A., and Lazarev, V. B.

TITLE:

Surface tension of metallic cesium

PERIODICAL:

Akademiya nauk SSSR. Izvestiya. Otdeleniye khimicheskikh nauk, no. 2, 1962, 358 - 359

TEXT: The surface tension of cesium was repeatedly measured at three different temperatures with a glass instrument devised by O. A. Timofeyevicheva and based on the bubble pressure principle. The following values were found: $\sigma = 67.5$ dynes/cm at 62°C ; $\sigma = 62.9$ dynes/cm at 146°C ; $\sigma = 62.4$ dynes/cm at 152°C . These results are in good agreement with the theoretical data available in the literature. There are 1 figure and 12 references: 5 Soviet and 7 non-Soviet. The two references to English-language publications read as follows: E. E. Poindexter, M. Kernachan, Phys. Rev. 27, 820 (1926); J. W. Taylor, Philos. Mag. 46, 867 (1955).

Card (1/2)

Surface tension of metallic cesium

33985
S/062/62/000/002/010/013
B117/B138

ASSOCIATION: Institut obshchey i neorganicheskoy khimii im. N. S. Kurnakova
Akademii nauk SSSR (Institute of General and Inorganic
Chemistry imeni N. S. Kurnakov of the Academy of Sciences USSR)

SUBMITTED: February 7, 1961 (initially),
October 26, 1961 (after revision)

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Card 2/2

SOLOV'YEV, A.V., inzh.; TIMOFEYEVICH, M.S., inzh.

Device for the automatic control of electric lighting.
Svetotekhnika 7 no.5:25-27 My '61. (MIRA 14:6)
(Electric lighting)
(Automatic control)

84689

S/020/60/134/004/014/023
B016/B060

// 3000
AUTHORS:

Timofeyevicheva, O. A. and Pugachevich, P. P.

TITLE:

The Dependence of Surface Tension in Gallium on Temperature

PERIODICAL:

Doklady Akademii nauk SSSR, 1960, Vol. 134, No. 4,
pp. 840 - 843

TEXT: The authors measured the surface tension σ of gallium in vacuum by the method of maximum pressure in the drop at temperatures between 300° and 500°C. An instrument was used to this effect, as described in Ref. 5 (Fig. 1). Molten gallium was filtered off from oxides, and heated up to 1000°C in a quartz apparatus. A particularly good degasification and elimination of impurities was achieved in this way. The surface tension was measured in much the same way as that of indium (Ref. 5). The paper of Ref. 6 provided the data of density at different temperatures required for calculating this tension. Results obtained from the σ measurement in gallium are given in Table 1 and Fig. 2. Equation (1) gives the dependence of gallium on temperature; this dependence is not linear. As may be seen, the temperature coefficient of the gallium surface tension is not only

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The Dependence of Surface Tension in Gallium
on Temperature

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dependent on temperature, but is also peculiarly small as compared with the dc/dT of other metals. In the authors' opinion, the most probable cause for the nonlinearity of the surface tension as a function of temperature is to be seen in the presence of surface-active impurities. The authors succeeded in proving more clearly than has hitherto been done that the surface tension is dependent on the position in the periodic system of the elements concerned (Fig. 4). It may be seen that surface tension, density, and the reciprocal value of compressibility are a periodic function of the atomic number of the element concerned. The extremes of the above properties fall to the same groups of elements (Fig. 4). As expected, the experiment confirmed the surface tension of gallium as being higher than the σ of germanium and lower than the σ of zinc. The authors also found a confirmation of their anticipation (Ref. 5), according to which the σ of indium was bound to be about as high as the σ of cadmium and tin (Refs. 5, 27). The rules found to govern the relations between the surface tension and other properties of the elements, on the one hand, and their atomic number, on the other, point to an intimate interrelation of surface- and volume properties of matter. Mention is made

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The Dependence of Surface Tension in Gallium
on Temperature

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of a paper by A. Frumkin and A. Gorodetskaya (Ref. 2) published in Zs. Phys. Chem., and also of papers by A. M. Korol'kov (Ref. 4), E. Kristian and Pokrovskiy (Ref. 19). There are 4 figures, 1 table, and 27 references: 12 Soviet, 4 US, 4 German, and 6 British.

ASSOCIATION: Institut obshchey i neorganicheskoy khimii im. N. S. Kurnakova Akademii nauk SSSR (Institute of General and Inorganic Chemistry imeni N. S. Kurnakov of the Academy of Sciences, USSR)

PRESENTED: April 27, 1960, by I. I. Chernyayev, Academician

SUBMITTED: April 24, 1960

Card 3/3

TIMOFEEVICHEVA, O.A.; PUGACHEVICH, P.P.

Surface tension of metallic indium. Dokl. AN SSSR 124 no.5:1093-1094
(MIRA 12:3)
F '59.

1. Institut obshchey i neorganicheskoy khimii imeni N.S. Kurnakova
AN SSSR. Predstavleno akademikom I.I. Chernyayevym.
(Indium) (Surface tension)

TALYZINA, V.A.; TIMOFEYEVSKAYA, Ye.A.; URAZOVA, A.P.; FIRSOVA, G.A.

Use of cell lines from human tumors for the initial selection
of antineoplastic antibiotics. Antibiotiki 10 no.8:722-724
Ag '65. (MIRA 18:9)

1. Laboratoriya eksperimental'noy bioterapii opukholey (zav.-
chlen-korrespondent AMN SSSR prof. M.M. Mayevskiy) Instituta
eksperimental'noy i klinicheskoy onkologii AMN SSSR, Moskva.

MAYEVSKIY, M.M.; AVDEYEVA, I.A.; ROMANENKO, Ye.A.; URAZOVA, A.P.; BONDAREVA, A.S.;
TIMOFEEVSKAYA, Ye.A.; MAZAYEVA, V.G.; GOR'KOVA, N.P.; TAYSHINA, N.M.

Aurantin and its effect on experimental tumors. Antibiotiki
4 no.4:43-46 J1-Ag '59. (MIRA 12:11)

1. Laboratoriya eksperimental'noy bioterapii (zav. - chlen-
korrespondent AMN SSSR prof.M.M.Mayevskiy) Institute eksperimental'-
noy patologii i terapii raka AMN SSSR.

(ANTINEOPLASTIC AGENTS pharmacol)

(ANTIBIOTICS pharmacol)

TIMOFEYEVSKAYA, Ye.A.

Comparative data on the effect of actinomycin C and K on human
tumor cells in tissue culture. Antibiotiki 9 no.5:446-448
My '64. (MIRA 18:2)

1. Laboratoriya eksperimental'noy bioterapii (zav.- chlen-
korrespondent AMN SSSR prof. M.M. Mayevskiy) Instituta
eksperimental'noy i klinicheskoy onkologii AMN SSSR, Moskva.

TIMOFEEVAKA, Ye. A.

TIMOFEEVAKA, Ye. A. -- "Effect of Certain Antibiotics (Penicillin and Streptomycin) on the Growth of Tissues Outside of an Organism and Their Application in the Practice of Tissue Culture." Sub 11. Dec 52, Acad Med Sci USSR. (Dissertation for the Degree of Candidate in Medical Sciences.)

S0: Vechernaya Moskva January-December 1952

MAYEVSKIY, M.M.; URAZOVA, A.P.; ROMANENKO, Ye.A.; MOL'KOV, Yu.N.; BONDAREVA, A.S.; TIMOFEYEVSKAYA, Ye.A.; VIAZOVA, O.I.; MAZAYEVA, V.G.; TALYZINA, V.A.

Antitumor action of the antibiotic chrysomallin (2703). Antibiotiki
9 no.1:33-34 Ja '64. (MIRA 18:3)

1. Laboratoriya eksperimental'noy bioterapii (zav. - chlen-korrespondent AMN SSSR prof. M.M.Mayevskiy) Instituta eksperimental'noy i klinicheskoy onkologii AMN SSSR, Moskva.

TIMOFEYEVSKIY, Aleksandr Dmitriyevich, red.

[Models and methods in experimental oncology; practical manual]
Modeli i metody eksperimental'noi onkologii; prakticheskoe
posobie. Moskva, Medgiz, 1960. 244 p. (MIRA 13:9)
(ONCOLOGY)

KULIKOV, N.V.; PORYADKOVA, N.A.; AGAFONOVA, S.V.; TIMOFEYEV-RESOVSKIY, N.V.

Action of radiators on phytocenoses and the effect of the latter
on the migration and redistribution of radioisotopes in soils.
Trudy Inst.biol.UFAN SSSR. no.22:31-47 '62. (MIRA 16:3)
(RADIOISOTOPES) (PLANTS, EFFECT OF RADIATION ON)
(SOILS)

TIMOFEYEV-RESOVSKIY, N. V.

"Darwinism and Cybernetics" (8 January 1960)

report delivered at a seminar on cybernetics, Moscow State University

So: Problemy kibernetiki, Issue 5, 1961, pp. 289-294

AGRE, A.L.; RAYKO, A.P.; TIMOFIYEV-RESOVSKIY, N.V.

Effect of the various biomass of aquatic plants on the concentration of microquantities of cesium and strontium in tanks with slow circulation. Biul.MOIP.Otd.biol. 67 no.5:120-127 S-0 '62.
(MIRA 15:10)

(FRESHWATER FLORA) (WATER--PURIFICATION)
(RADIOISOTOPES)

PREOBRAZHENSKAYA, Ye.I.; TIMOFEYEV-RESOVSKIY, N.V.

Possible relationship between radioresistance and the phylogenetic system in cultivated plants. Dokl. AN SSSR 143 no.5: 1219-1221 Ap '62. (MIRA 15:4)

1. Biologicheskii institut Ural'skogo filiala AN SSSR.
Predstavleno akademikom A.L.Kursanovym.
(Plants, Effect of radiation on)

TIMOFEYEVA-RESOVSKAYA, Ye.A.; TIMOFEYEV-RESOVSKIY, N.V.; GILEVA, E.A.

Specific accumulators of individual radioisotopes among fresh-water organisms. Dokl. AN SSSR 140 no.6:1437-1440 0 '61. (MIRA 14:11)

1. Laboratoriya biofiziki Ural'skogo filiala AN SSSR. Predstavleno akademikom V.N.Sukachevym.

(RADIOISOTOPES) (FRESH-WATER BIOLOGY)

27.300

№ 2204, 1565, 1234 1282

31450
S/626/60/000/012/005/010
D298/D303

AUTHOR: Luchnik, N. V., and Timofeyeva-Resovskaya, Ye. A.

TITLE: Radiation afflictions and factors which affect them.
V. The action of cysteine and certain other sulfurous
substances on the effect of irradiating animals and
plants

PERIODICAL: Akademiya nauk SSSR. Ural'skiy filial. Institut bio-
logii. Trudy. no. 12. Moscow, 1960. Sbornik rabot La-
boratorii biofiziki. No. 2: Problemy biofiziki, 76-92

TEXT: Together with L. S. Tsarapkin the authors conducted experi-
ments to determine the protective action of cysteine on irradiated
rats, mice and pea varieties. Irradiation was carried out from an
x-ray (rats) or gamma-ray Co⁶⁰ (mice, pea) source. The irradiation
intensity was 15 r/min for the rats and 10 or 50 r/min for the
mice. Cysteine was injected intravenously, subcutaneously or intra-
abdominally at a pH of about 7. Before irradiation the pea seeds or
sprouts were soaked for 1 - 6 hours in a 0.001, 0.01 or 0.1 mol/l

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S/626/60/000/012/005/010

D298/D303

Radiation afflictions and ...

concentration of cysteine. The radiation and cysteine doses were 450, 500, 550, 600 and 650 r and 100 or 900 mg/kg for the rats. The mice were irradiated in doses of 500 - 800 r and received 5, 10, 15, 20 or 25 mg of cysteine. The pea seeds and sprouts were irradiated in doses of 400 - 700 r. Other sulfurous agents, in addition to cysteine, were tested: Thiourea, hydrosulfite, hyposulfite, methylthiouracyl and thioglycolic anilide. The injection of cysteine before irradiation in moderate doses increased the number of rats which survived; at higher doses of radiation it increased the animal's average life span. The injection of cysteine after irradiation gave no effect. In rats the injection of cysteine had no effect on the initial drop in weight and number of formed elements in the peripheral blood but did accelerate the return of these indices to normal. The effect of cysteine on mice varied from strain to strain and also from male to female within the same strain. The protective effect of cysteine increased with a rise in the amount injected up to subtoxic doses. The other sulfurous substances tested in experiments on mice proved to have much less pronounced protective ability than cysteine. Cysteine had no vi-

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D298/D303

Radiation afflictions and ...

sible effect on non-irradiated pea strains. When administered before irradiation, however, it reduced the inhibition of growth and the number of abnormal mitoses, both of which effects were correlated with each other. The protective action of cysteine on pea varieties was approximately proportional to the logarithm of its concentration. The maximum protective effect was achieved by soaking the seeds or shoots in a cysteine solution for a period of 2 hours. For the cysteine to have a protective effect it must be present in the tissues at the time of irradiation. Some findings indicated that cysteine predominantly effects, not the number of primary breaks, but their future fate. The fact that cysteine must be in the tissues at the time of irradiation to have any protective effect indicates that cysteine acts by reducing the output of the products of water radiolysis. Other findings rather discount the oversimplified concept that cysteine merely decreases the "effective dose". Cysteine probably acts differently on the various effects of irradiation, probably through interacting with the physiological processes. There are 10 figures, 12 tables and 16 references: 5 Soviet-bloc and 11 non-Soviet-bloc. The 4 most recent refer-

x

Card 3/4

Radiation afflictions and ...

31450
S/626/60/000/012/005/010
D298/D303

rences to the English-language publications read as follows: W. T. Burnett, G. E. Stapleton a. A. Hollaender, Protective action of some sulfur-containing and sulfur-free compounds against X-ray damage in bacteria. Fed. Proc., 1951, vol. 10, p. 22; L. O. Jacobson, A humoral factor concerned in recovery from irradiation injury. Canc. Res., 1952, vol. 12, p. 315; G. Limperos, Alteration of the mortality of roentgen-irradiated mice by chemical means. Am. J. Roentgenol., 1952, vol. 67, p.810; R. H. Mole, Protection from whole body-irradiation by chemical means. J. Chim. Phys., 1951, vol. 48, p. 258. X

Card 4/4

21.4500

31153
S/626/60/000/012/008/010
D298/D303

AUTHORS: Timofeyeva-Resovskaya, Ye. A., and Timofeyev-Resovskiy, N. V.

TITLE: Distribution of dispersed elements among the components of reservoirs. II. Pedobiological deactivation of water in cesspools

PERIODICAL: Akademiya nauk SSSR. Ural'skiy filial, Institut biofiziki. Trudy. no. 12. Moscow, 1960. Sbornik rabot Laboratorii biofiziki. no. 2: Problemy biofiziki, 194-223

TEXT: Experiments at the authors' laboratory showed that soil-sand filters were very effective in deactivating radioactive solutions passed through them. Depending on the type of the filter and the elements in the solution, the degree of deactivation varied from 80 to 99%. This led to further experiments to determine whether radiobiological methods could be used for deactivating various waste waters containing weak concentrations of various radioactive agents. The tests were conducted with outside installations

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Distribution of dispersed ...

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S/626/60/000/012/008/010
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consisting of a soil filter and a small settling tank. The present article gives the results of all experiments conducted with these installations so far. The soil filters consisted of galvanized iron drums fitted low down with a side drainage pipe. The drums were filled to a depth of 20 cm with a layer of small pebbles and coarse gravel, surmounted by a mixture of equal parts of garden soil and lake sand. The volume of the soil-sand filter in the first installation was approximately 125 and in the second installation 100 liters. The radioactive solution entered the bath of the first installation at a rate of 250 l/day and that of the second installation at 300 l/day. Samples for measuring the radioactivity were taken from the bath, from the pool, during flow from the pool to the filter and during flow from the filter to the tank. In all tests on these installations a solution of uranium fragments with a concentration of 25 $\mu\text{c}/\text{l}$ of gamma-radiation was used. The third installation consisted of 3 interconnected pools, but without a soil filter. Radioactive solution was released from the tank at a rate of 1,000 l/day. The concentration of the solution was 10 $\mu\text{c}/\text{l}$. The results are given separately for experiments on the first two

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Distribution of dispersed ...

installations, experiments with the third installation, and the results of measuring the radioactivity in the vertical layers of the soil filters and in the soil and biomass of the pools. Experiments with the first two installations showed that the pools and filters absorbed about 99% of the radioactivity that entered them. Consequently, only about 1% of the radioactivity admitted flowed out at the end of the installation. The filter of the second and the pool of the first installations worked somewhat worse than the filter of the first and the pool of the second. Measurements showed that passage through the filter and passage through the pool contributed almost equally to reduction of the beta-radiation hardness. This tends to show that the pools and soil filters primarily retain the same elements from the mixture of radioactive agents. This would explain the fact that the second cleansing device (pool or filter) in each installation functioned somewhat worse than the first device. Observations were kept up for 3 years. In the course of this period and in experiments with forced operation (a flow of 1,000 l/day) no saturation of the pools was noted. On the basis of the results from experiments with the first two installations it was

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decided to do away with the soil filter, replacing it with pools. The third installation consisted, in effect, of a cascade of three pools. It was found that less than 1% of the radioactivity admitted to the installation emerged at the far end of the cascade. Moreover the first pool worked better than the subsequent ones. Measurements of the radioactivity in the soils and living organisms showed especially high coefficients of accumulation of the radioactive agents in plankton, duckweed, submerged plants and muddy deposits on the pool bottom. The authors were assisted in their work by L. Sycheva, L. Moshkina and A. K. Uralets. There are 10 figures, 24 tables and 27 references: 23 Soviet-bloc and 4 non-Soviet-bloc. The references to the English-language publications read as follows: C. C. Coffin, F. R. Hayes, Z. N. Yordey and S. G. Whiteway, Exchange of materials in a lake as studied by the addition of radioactive phosphorus. Can. J. of Res., vol. 27, 1944; F. R. Hayes, On the kinetics of phosphorus exchange in lakes. J. Ecol., 40(1), 1952; J. A. McCarter, Movement of material in the hypolimnion of a lake as studied by the addition of radioactive phosphorus. Can. J. of Zoology, vol. 30, 152; C. C. Ruchhoft, The possibilities of

Card 4/5

31453

Distribution of dispersed ...

S/626/60/000/012/008/010
D298/D303

disposal of radioactive wastes by biological treatment methods.
Sewage works J.. V., 21, 1949.

X

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21.4500

29421

S/081/61,000/017/062/166
B110/B138

AUTHORS: Timofeyeva-Resovskaya, Ye. A., Agafonov, B. M.,
Timofeyev-Resovskiy, N. V.

TITLE: Biological soil deactivation of water

PERIODICAL: Referativnyy zhurnal. Khimiya, no. 17, 1961, 302, abstract
174321 (Tr. In-ta biol. Ural'skiy fil. AN SSSR, no. 13,
1960, 35-48)

TEXT: The investigations were carried out on laboratory filters, in pools and in aquariums with weak current. On an average, the following was retained in filters (filtering rate 0.6 m/hr) filled with mud, clay, activated carbon etc. (in %): Cs = 100; Sr and Y = 99; a mixture of Nb, Zr, Ce and U fragments = 80 - 90; Ru = 60 - 70. Optimum deactivation was observed with natural mud (no active solution passed when some hundreds of volumes of a solution with a concentration of 10 - 20 $\mu\text{Cu/l}$ were filtered). The accumulation coefficients were calculated. For higher aquatic plants they are 10^2 - 10^3 , for large water invertebrates 10^2 - 10^3 , for small or s

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29121

S/081/61, 000/017/062/166

B110/B138

Biological soil deactivation of water

(zoo- and phytoplankton and periphyton) 10^3 - 10^4 . In experiments made in pools a 90 % water deactivation was attained. When a uranium solution with a concentration of $10 \mu\text{Cu}/\text{l}$ was passed through three successive pools, 99 % of the initial activity were kept back. The activity in the concentration of 10^{-6} - $10^{-4} \mu\text{Cu}$ stimulates the development of fresh water biocoenosis and of the microflora of the soil and the water.

[Abstracter's note: Complete translation.]

X

Card 2/2

TIMOFEYEV-RESOVSKAYA, Ye.A.; AGAFONOV, B.M.; TIMOFEYEV-RESOVSKIY, N.V.

Biological decontamination of water by soil. Trudy Inst. Biol.
UFAN SSSR no. 13:35-48 '60. (MIRA 14:1)
(Water--Purification) (Radioactive substances)

ACCESSION NR: AP4017609

S/0033/64/041/001/0003/0006

AUTHOR: Pariyskiy, Yu. N.; Timofeyev, G. M.

TITLE: Structure of the Cyg-A and Vir-A radiosources
SOURCE: Astronomicheskoy zhurnal, v. 41, no. 1, 1964, 3-6

TOPIC TAGS: Cyg A, Vir A, radiotelescope, stellar radiation, NGC 4486

ABSTRACT: Observations on the Cyg-A and Vir-A radiosources at a wavelength of 3.02 cm were conducted in January and February of 1963 using the large Pulkovo radiotelescope, which has a resolution of about 1'. The results were essentially as follows: Cyg-A. The source is asymmetric and the angular magnitude of its western component is as low as 15". The positional angle of the axis linking both components is $125^\circ \pm 15^\circ$, which is higher than that found at wavelengths of 10 mm, 21 mm and 1 meter, and agrees with previous Pulkovo observations indicating a marked dependence of the intercomponent distance, the component effective magnitudes and the intercomponent radiation intensity on the wave length. The absence of intercomponent radiation at 3.02 cm is very likely. Vir-A. The radiation of the principal body of the NGC 4486 galaxy, observed at 3.02 cm, is considerably less than that found in the decimeter and meter bands. Conversely, the contribution of the central source, whose angular dimension is $<1'$, is inversely propor-

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ACCESSION NR: AP4017609

tional to the wavelength. The character of the radiotelescope image suggests a significant deviation of the genuine shape of the central source from the Gaussian curve, which may be explained by a possible existence of two minor sources 20-30" apart. "The authors would like to thank S. E. Khaykin for his interest in the work, A. B. Berlin for his help in making the observations and designing the apparatus, and D. V. Korol'kov for his criticism of the manuscript." Orig. art. has: 3 graphs.

ASSOCIATION: Glavnaya astronomicheskaya observatoriya Akademii nauk SSSR
(Main Astronomical Observatory, Academy of Sciences SSSR)

SUBMITTED: 24May63

DATE ACQ: 18Mar64

ENCL: 00

SUB CODE: AS

NO REF SOV: 004

OTHER: 001

Cord 2/2

TIMOFEYEVICH, I.M.

New design for rings and travelers. Tekst.prom. 21 no.3:22-25
Mr '61. (MIRA 14:3)

(Spinning machinery)

TRONSTON, T., starshiy inzhener, sobremennik

Shags with inclined flange. Tekst. prom. 21 no.10:37-
4 10.

(MIRA 14:10)

1. Vsesoyuznyy nauchno-issledovatel'skiy institut legkogo
i tekstil'nogo mashinostroyeniya.
(Spinning machinery)

TIMOFEEVICH, I.M.

Ways of improving the performance of the "ring-traveler" pair
in spinning and twisting. Tekst.prom, 20 no.10;24-28 0'60.

(MIRA 13:11)

(Textile machinery)

TIMOFEYEVICH, V.S., inzh.

Assembling a standard blast furnace with a capacity of 1719 m³.
Mont. stroit. konstr. no. 2/12:3-14 '59. (MIRA 14:2)

1. Proyektnyy institut Promstal'konstruktsiya.
(Blast furnaces)

TIMOFEYEVICH, Vladimir Semenovich. Prinimal uchastiye SIVITSKIY, Ye.S.
SOKOLOVA, A.D., nauchnyy red.; PODOBED, E.G., red.; PERSON, M.N.,
tekhn.red.

[Assembling steel structures] Montazh stal'nykh konstruktsii.
Izd.3., ispr. 1 dop. Moskva, Vses.uchebno-pedagog.izd-vo
Proftekh.izdat, 1960. 367 p. (MIRA 13:9)
(Building, Iron and steel)

TIMOFEEVICHEVA, O.A.; LAZAREV, V.B.

Temperature dependence of the surface tension of thallium. Dokl. AN
SSSR 138 no.2:412-414 My '61. (MIRA 14:5)

1. Institut obshchey i neorganicheskoy khimii im. N.S.Kurnakova
Akademii nauk SSSR. Predstavleno akademikom I.V.Tananayevym.
(Surface tension) (Thallium)

ITSIKSON, M.I.; PROKOF'YEV, A.P.; SHEYN, V.Z.; TIMOFEYEVSKAYA, G.V.

Genetic features of the Lesser Khingan Range tin-bearing region.
Sov.geol. no.14-15:43-57 '47. (MLRA 8:8)
(Khimgan Range, Lesser--Tin ores)

TIMOFIYEVSKAYA, L.A.

Toxicological characteristics of monoethanolamine. Toks.nov.
prom.khim.veshch. no.4:81-91 '62. (MIRA 16:1)
(ETHANOL—TOXICOLOGY)

KREMNEVA, S.N.; TIMOFEYEVSKAYA, L.A.; ZAYEVA, G.N.

New chemical substances. Gig. truda i prof. zab. 4 no.2:60-61
F '60. (MIRA 15:3)

(PHARMACEUTICAL RESEARCH)

TIMOFEEVSKAYA, L.A.

Use of prednisone in the compound treatment of pneumonia in infants.
Vop. okh. mat. i det. 6 no.7:12-14 J1 '61. (MIRA 14:8)

1. Iz detskoy klinicheskoy bol'nitsy No.2 Omska (glavnyy vrach T.N. Koslova) i kafedry detskikh bolezney (zav. - prof. V.P.Bisyarina)
Omskogo meditsinskogo instituta imeni M.I.Kalinina.
(PNEUMONIA) (PREGNADIENETRIONE)

MAYEVSKIY, M.M.; ROMANENKO, Ye.A.; URAZOVA, A.P.; MOL'KOV, Yu.N.;
TIMOFEEVSKAYA, Ye.A.; BONDAREVA, A.S.; MAZAYEVA, V.G.;
TALYZINA, V.A.; BYAZOVA, O.I.

Effect of the antibiotic olivomycin on transplanted tumors.
Antibiotiki 7 no.3:64-67 Mr '62. (MIRA 15:3)

1. Laboratoriya eksperimental'noy bioterapii (zav. - chlen-
korrespondent AMN SSSR prof. M.M. Mayevskiy) Instituta
eksperimental'noy i klinicheskoy onkologii AMN SSSR.
(ANTIBIOTICS)
(CYTOTOXIC DRUGS)

TIMOFEYEVSKAYA, Ye.A.

Effect of aurantin on human tumor strain cultures. Antibiotiki 7
no.1:32-35 Ja '62. (MIRA 15:2)

1. Laboratoriya eksperimental'noy bioterapii (zav. - chlen-korrespondent
AMN SSSR prof. M.M.Mayevskiy) Instituta eksperimental'noy i klinicheskoy
onkologii AMN SSSR.
(ANTIBIOTICS) (TUMORS)

ZAYTSEV, Vladimir Semenovich; TIMOFEYEVSKIY, Aleksandr Antonovich;
NOVIKOV, Petr Grigor'yevich; DAVYDOVA, Yu.F., red.;
KUDRYAVTSEVA, O.V., tekhn. red.

[The second phase; the CPSU in the struggle for the building of socialism] Na vtorom etape; KPSS v bor'be za postroenie sotsializma. Moskva, Izd-vo "Znanie," 1963. 72 p. (Novoe v zhizni, nauke, tekhnike. I Seriya, no.15-16) (MIRA 16:11)
(Communist Party of the Soviet Union)
(Russia--Economic conditions)

TIMOFEYEVSKIY, A. D.

Tuberculosis Infection in Human Leucocyte Cultures," Zhu. Microb., Path.
& Inf. Dis. 4 (1) 31-2, '27.

TIMOFEYEVICHEVA, O.A.; PUGACHEVICH, P.P.

Temperature dependence of the surface tension of gallium. Dokl.
AN SSSR 134 no.4:840-843 O '60. (MIRA 13:9)

1. Institut obshchey i neorganicheskoy khimii im. N.S.Kurnakova
Akademii nauk SSSR. Predstavleno akad. I.I.Chernyayevym.
(Gallium) (Surface tension)

TIMOFEEVSKIY, A. D.

THE EFFECT OF CANCEROGENIC SUBSTANCES ON RAT TISSUE CULTURES A. D. Timofeevskiy and S. V. Benevolenskaya. *Vopr. ser. biol. (U. S. S. R.)* 56, No. 3, 23-31 (in English, 311) (1959). — Consens. of 1,2,5,6-dibenzanthracene of 1 - 1000-1-5000 allow normal growth of embryonic rat tissue, blood leucocytes and bone marrow cultures of adult rats for 1 month, after which gradual cell degeneration sets in. Methylcholanthrene (I) and 3,4-benzopyrene are much more toxic and consens. of 1-10,000-1-200,000 cause culture degeneration after a latent period varying from several days to 1 month. Consens. of 1-500,000-1-1,000,000 maintain the life of the culture for 2-3 months, after which weakening and culture degeneration set in. No stimulating action on the growth of the cultures was observed. Subcutaneous inoculation into 4 rats of cultures raised in I for 1.5-2 months and then for 13-20 days in a normal medium gave neg. results. S. A. Karnala

ASR-SLA METALLURGICAL LITERATURE CLASSIFICATION

1ST AND 2ND COLUMNS																										PROCESSES AND PROPERTIES INDEX																									
TIMOFEEVSKIY, A. D.																										A																									
BC																																																			
<p>Prolonged culture of human malignant tumour tissue. A. D. Timofeevski (U.S.S.R. 1940, 8, 1272-1279).—After culture for 1—8 years in mouse embryonic cell embryo extract certain tumour cells revert to the type of cell from which they arose. A sarcoma produced cells typical of embryonic mesenchyma, and hypernephroma gave pituitary-adrenal cells. Sarcoma gave typical striated muscle cells, and a dermal neurofibroma gave Schwann membrane cells after 20 months of culture, involving 24 passages. (12 photomicrographs.) R. T.</p>																																																			
ASB-5LA METALLURGICAL LITERATURE CLASSIFICATION																																																			
1ST AND 2ND COLUMNS																										PROCESSES AND PROPERTIES INDEX																									

Some results of a study of the action of synthetic carcinogenic hydrocarbons on tissue cultures. A. D. Timofeevskii and S. V. Benevolenskaya. *J. med. Ukraine* 10, 79-80 (Russian and English summaries) (1940); cf. C. A. 34, 6481, 7302. —The results of 60 expts. on the action of 1,2,5,6-dibenzanthracene, methylcholanthrene and 3,4-benzopyrene on cultures of chick mesenchyma and rat embryonal tissues are presented. The carcinogenic substances (I) were introduced in various dilns. (from $1 \cdot 10^4$ to $1 \cdot 10^6$) into the solid phase of the culture in the form of a fine suspension obtained by ultrasonic action. The cultures grew after the addn. of I from a period of several days to 3 months, depending on the concn. Part of the cultures were then grown on a normal medium for another 2-3 months. The morphology of the cultures and the energy of their growth were studied and attention was paid to the phenomenon of cell degeneration and the deviation from the normal course of mitotic division. For this purpose control cultures were always inoculated at the same time; these cultures were taken from the same inoculating material on a normal medium. I possess a toxic action on the cells of tissue cultures, which is expressed in degenerative phenomena and in the cessation of culture growth. The toxic action is, in general, proportional to the concn. of I and to the duration of their action on the cultivated tissues. The toxic action of 1,2,5,6-dibenzanthracene is weakly defined. At a concn. of $1 \cdot 10^4$ the cultures remain viable for 1 month or more; then a diminution and cessation of growth occurs. The toxic action of methylcholanthrene and 3,4-benzopyrene is very pronounced. With concns. of $1 \cdot 10^4$ to $1 \cdot 2 \times 10^4$ in the hard phase of the cultures, a complete degeneration of all cul-

tures sets in within a few days. But even at these concns the cultures give normal growth during the first 1-3 days. Thus, the latent period is always well defined. With concns. of methylcholanthrene and 3,4-benzopyrene of $1 \cdot 5 \times 10^4$ and $1 \cdot 10^4$ some of the cultures survive 3-4 months, whereas others undergo degeneration earlier. Cultures growing with added I at higher concns. are subject to degeneration even when they are re-inoculated into a normal medium. Degeneration phenomena in the cells caused by I are not of any specific nature. In the cultures of chick and rat tissues, growing for some time with I added in doses, which do not cause a pronounced cell injury, there is a somewhat more frequent occurrence of various departures from the normal course of cell mitosis as compared to the controls (tripolar and tetrapolar mitosis, etc.). Such abnormalities are observed even in cultures which, after cancerogenic action in weak toxic doses, were cultivated for several weeks on a normal nutrient medium. In all expts. with chick and rat tissues, except one, no signs were noted which would point to conversion *in vitro* of the cells into a malignant form. The morphology of the cultures and the energy of proliferation of the cells were unchanged until the beginning of degeneration phenomena. The cancerogenic hydrocarbons are not common stimulants of growth. Grafting of chick mesenchyma cultures, grown with added I in the course of 1-3 months, to 21 growing with added I in the course of 1-3 months, to 21 sub-fowl and grafting the corresponding cultures on 4 rats sub-dermally gave neg. results. In only one expt., in which rat embryonal mesenchyma was cultivated in a medium with 3,4-benzopyrene at a concn. of $1 \cdot 5 \times 10^4$ in Carrel flasks,

...in which the carcinogenic hydrocarbon in horse serum had been added to the liquid phase of the culture from time to time, was the appearance noted on the 75th day of the expt. in 2 cultures out of 13 of a new race of cells, which differed in morphology from the controls and posed pronounced proliferative energy. These altered cultures could be rapidly reproduced; in 2 months about 200 cultures consisting of homogeneous cells with new biol. properties were obtained. In contrast to the typical fibroblasts of the controls, the altered cells had a distinctly contoured protoplasm, densely stained by basic dyes, and large oval nuclei, rich in chromatin, with a thick nuclear coat membrane wall. It may thus be assumed that, under the influence of 3,4-benzopyrene, a new race of cells arose. It would, however, be premature to state that conversion of the cells to a malignant type occurred here. Grafting such cultures subdermally on the backs of 15 young rats (1-10 cultures on each animal) gave neg. results. Even these neg. results cannot, however, be considered an indubitable indication that no conversion of the cells to a malignant form occurred. R. Berggren

TIMOFEYEVSKIY, A. D.		PROCESSING AND PROPERTY INDEX	
BC		R-4	
<p>Effect of horse serum on cultures of human tissues of mesenchymal origin. A. D. Timofeyevskiy and S. N. Benevolenskaya (<i>J. Med. Ukraine</i>, 1946, 16, 1113-1116).—Passage cultures of mesenchyme (lymph nodes, inflamed connective tissue) and sarcoma were divided into 2 equal parts; one was implanted in a medium of cytotoxic serum (2-5-20%), the second in normal horse serum. 2-5% of cytotoxic serum in the nutrient medium does not inhibit growth of mesenchyme; 5% has a retarding effect on proliferation of cells. Lymphocytes of lymph nodes are especially sensitive, undergoing degeneration in 2-5%.</p>			
A 58-35A METALLURGICAL LITERATURE CLASSIFICATION			
191083 MAY 04V 081		191083 MAY 04V 081	
191083 MAY 04V 081		191083 MAY 04V 081	

PA 11T99

TIMOFEYEVSKIY, A. D.

USSR/Medicine - Hematology
Medicine - Leukemia

May/Jun 1947

"Lymphocyte, Monocyte and Myelocyte of Normal and
Leukemic Blood of Man in Explantates," A. D. Tim-
ofeyevskiy, S. V. Benevolenskaya, 9 pp

"Arkhir Patologii" Vol IX, No 3

General discussion, illustrated with microphotographs,
of development of macrophages from lymphocytes,
development of lymphoid cells into eosinophiles, etc.

11T99

TIMOFEEVS'KIY, O.D.

TIMOFEEVS'KIY, O.D., prof.

New data on the explantation of human neoplasms. Medych.zhur. 16:
61-73 '47. (MIRA 10:12)

1. Z laboratorii eksperimental'noi tsitologii Institutu eksperimental'-
noi biologii i patologii Ministerstva okhoroni zdorov'ya URSS
(direktor akad. O.O.Bogomolets' [deceased]). 2. Diysniy chlen AMN SSSR.
(TUMORS) (HISTOLOGY, PATHOLOGICAL)

TIMOFEYEVSKIY, O.D.

TIMOFEYEVSKIY, O.D.; BENEVOLENS'KA, S.V., starshiy nauchnyy spirobitnik

Effect of antireticular cytotoxic serum on leucocyte cultures in
human blood. Medych.zhur. 16:74-82 '47. (MIRA 10:12)

1. Z laboratorii eksplantatsii tkanini (zav. - chlen-kor. AN URSS.
O.D.Timofeyevskiy) Institutu klinichnoi fiziologii AN URSS (direktor -
akad. O.O.Bogomolets' [deceased]). 2. Chlen-korespondent AN URSS
(for Timofeyevskiy).
(SERUM) (LEUCOCYTES)

TIMOFEYEVSKIY, A. D.

Timofeyevskiy, A. D. "Laws of the growth and differentiation of explanted tumors",
Trudy Chetvertoy sessii Akad. med. nauk SSSR, Moscow, 1948, p. 155-60.

SO: U-2888, 12 Feb. 53, (Letopis' Zhurnal 'nykh Statey, No. 2, 1949).

TIMOFEYEVSKIY, O.D.

TIMOFEYEVSKIY, O.D.

Achievements in the field of explantation of human neoplasms. Medych.
zhur. 18 no.1:55-61 '48. (MIRA 10:12)

1. Z Institutu klinichnoi fiziologii im. akad. O.O.Bogomol'tsya AN
URSR. 2. Deyaniy chlen AN SRSR.
(CANCER)

ТИМОФЕЕВСКИЙ, А. Д.

28648

Gorodetskiy, A. A. Dyeystviye Luchey. Ryent Gyena Na Eksplantaty Opukholyey
Chy elovyeka Uchyen. Zapiski. (Kiyevsk Ryentgyeno Radiol. I Onkol. In-T). T.1,
1949, S. 165-84

SC: LETCPIS NC. 38

TIMOFEEVSKIY, A. D.

24439 TIMOFEEVSKIY, A. D. Melanoblastomy cheloveka v eksplantatakh. Trudy
Akad. med. nauk SSSR, T. III, 1949, S. 235-41.

SO: Letopis, No. 32, 1949.

TIMOFEYEV'S'KIY, O.D.

TIMOFEYEV'S'KIY, O.D.; BENEVOLENS'KA, S.V.

Anaplasia and differentiation phenomena in explants of animal
neoplasms. Medych.zhur. 19 no.1:3-21 '49. (MIRA 10:12)

1. Z viddilu eksplantatsii tkanin Institutu klinichnoi fiziologii im.
akad. O.O.Bogomol'tsya AN URSS (direktor Institutu - chlen-kor. AN
URSS prof. P.Ye. Kavetskiy).
(CANCER)

Timofeyevskiy, O.D.
TIMOFEYEVSK'KIY, O.D.

On the problem of histogenesis of neoplasms in man based on
explantation experiments. Medych.zhur. 19 no.2:3-13 '49.

(MIRA 10:12)

1. Z viddilu eksperimental'noi tsitologii Institutu eksperimental'-
noi biologii i patologii im. akad. O.O.Bogomol'tsya Ministerstva
okhoroni zdorov'ya URSR (direktor - prof. Oleg O.Bogomolets'). 2.
Diysniy chlen AMN SRSR.

(CANCER)

TIMOFEYEVSKIY O.D.

TIMOFEYEVSKIY, O.D.; BENEVOLENS'KA, S.V., st.nauk.spivr.

Inducing malignant growth in connective tissue cultures. Medych.
zhur. 20 no.2:18-23 '50. (MIRA 11:1)

1. Z viddilu eksplantatsii tkanini (zav. viddilu - diysn. ch. AMN
SSSR O.D.Timofeyevs'kiy) Institutu klinichnoi fiziologii im. akad.
O.O.Bogomol'tsa Akademii nauk URSS (direktor - chl-kor. AN URSS
R.Ye.Kavets'kiy)
(CNCER) (CHOLANTHRENE)

TIMOFEYEV'S'KIY, B.D., prof.; BENEVOLENS'KA, S.V., st.nauk.spivbor.

Effect of methylcholanthrene on long-term cultures of neuroectodermal and epidermal tissue. Medych.zhur. 21 no.3:16-20 '51. (MIRA 11:1)

1. Z viddilu eksplantatsii tkanin (zav. - diysniy chlen AMN SRSR prof. O.D.Timofeyevs'kiy) Institut klinichnoi fiziologii im. akad. O.O.Bogomol'tsYa NA URSR (direktor - diysniy chlen AN URSR P.Ye. Kavits'kiy)

(CHOLANTHRENE) (TISSUE CULTURE) (CANCER)

copy
TYMOFYEYEV'S'KYY, O.D., professor, ~~disney~~ chlen Akademiyi nauk Ukrayins'koyi RSR, zaviduvach; KHOMEYNS'KYY, B.S., professor, zaviduvach; NADHORNNOYI, N.I., likar-laborant; BOHOMOLETS', O.O., professor, dyrektor; ARUTYUNOV, O.I., professor, dyrektor.

Long term cultivation of certain tumors of the central nervous system. Medych. zhur. 21 no.4:24-35 '51. (MLRA 6:10)

1. Akademiya nauk Ukrayins'koyi RSR (for Tymofyeyeva's'kyy).
2. Viddil tsytolohiyi Instytutu eksperymental'noyi biolohiyi ta patolohiyi im. akad. O.O. Bohomol'tsya MOZ URSR (for Tymofyeyeva's'kyy).
3. Instytut eksperymental'noyi biolohiyi ta patolohiyi im. akad. O.O. Bohomol'tsya MOZ URSR (for Bohomolets').
4. Viddil patomorfologiyi Instytutu neyrokhirurhiyi (for Khomyns'kyy).
5. Instytut neyrokhirurhiyi (for Arutyunov). (Nervous system--Tumors)

TYMOFYEYEV'S'KYY, O.D.

Contraversial problems in the etiology of tumors. Medych.zhur. 22 no.4:8-15
'52. (MLRA 6:10)

1. Instytut klinichnoyi fiziologiyi im. akad. O.O.Bohomol'tsya AN URSR.
(Tumors)

TYMOFYEYEV'S'KYY, O.D.; BENEVOLENS'KA, S.V.

Rendering explantations of embryonic mesenchyma of chicks malignant by means of the nucleoproteid of the chick sarcoma. Medych.zhur. 22 no.4:16-19 '52.
(MLRA 6:10)

1. Instytut klinichnoyi fiziologiyi im. akad. O.O.Bohomol'tsya AN URSR.
(Tumors)